

THE GERRHONOTUS OF THE SAN LUCAN FAUNA, LOWER CALIFORNIA,  
WITH DIAGNOSIS OF OTHER WEST AMERICAN SPECIES.

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A little more than two years ago, in a consideration of the reptiles of Lower California,<sup>1</sup> I said that "Without larger series of the other species than are at hand, the status of the *Gerrhonoti* from the 'Cape Region' of Lower California cannot be satisfactorily determined. It seems probable, however, that they are distinct from the more northern *G. scincicauda*, and are referable to the name *G. multicaarinatus* Blainv." More recently<sup>2</sup> I have been able to examine large numbers of specimens of the four species of this genus which are known to occur in California, Oregon and Washington, and to discover more or less definite limits to their variation. I wish now to consider the status of the Lower Californian form.<sup>3</sup>

At first glance the lower Californian lizard bears a resemblance to *Gerrhonotus principis* of the Puget Fauna. This, however, is merely a superficial resemblance due to the comparative smoothness of these two forms, and in a less degree to their similar size and the occasional absence of complete dorsal color bands in the San Lucan species. In the number of the longitudinal rows of its dorsal scales this *Gerrhonotus* is similar to *G. palmeri* and *G. burnettii*. In other characters, however, it approaches *Gerrhonotus scincicauda*, to which I believe it is most closely related.

The following table shows the variation in the several species of those characters which seem to be of value in classification. The figures indicate the number of specimens examined.

From this table we may formulate a key which will serve to identify most specimens :

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<sup>1</sup> Proc. Cal Acad. Sci. (2), V, 1895, p. 119.

<sup>2</sup> Occasional Papers, Cal. Acad. Sci., V, 1897, pp. 102-115.

<sup>3</sup> In making this comparison I have had twenty six specimens from San José del Cabo, Sierra El Taste, Sierra San Lazaro, Sierra Laguna and Miraflores.

	<i>principis.</i>	<i>burnettii.</i>	<i>palmeri</i>	<i>multicarinatus.</i>	<i>scincicauda.</i>
Dark lines along middle of ventral scales,				26	91
Dark lines between ventral scales,	17	60	2		
Ventral dark lines absent,	10	17	14		2
Azygous prefrontal large,	1	7	17	26	89
Azygous prefrontal moderate,	10	26	1		4
Azygous prefrontal small,	16	41			
A single interoccipital,	4	8	15	26	84
Two to four interoccipitals,	23	71	1		8
No interoccipital,		1			1
Scale rows, $12\frac{2}{3}$ ,					3
Scale rows, 14,	19			3	87
Scale rows, $14\frac{2}{3}$ ,	8		1	2	3
Scale rows, $15\frac{1}{2}$ ,		5			
Scale rows, 16,		71	17	20	
Scale rows, 18,		1			

## KEY TO SPECIES.

*a.*—Dark ventral lines between the longitudinal rows of scales or absent,

*b.*—Dorsal scales weakly keeled, in fourteen (rarely  $14\frac{2}{3}$ ) longitudinal rows.

*G. principis.*

*b*<sup>2</sup>.—Dorsal scales strongly keeled, in sixteen (rarely  $14\frac{2}{3}$  or 18) longitudinal rows.

*c.*—Temporal scales smooth.

*G. burnettii.*

*c*<sup>2</sup>.—Lower temporal scales keeled.

*G. palmeri.*

*a*<sup>2</sup>.—Dark ventral lines along middle of longitudinal scale rows.

*d.*—Dorsal scales weakly keeled, in sixteen (rarely 14 or  $14\frac{2}{3}$ ) longitudinal rows.

*G. multicarinatus.*

*d*<sup>2</sup>.—Dorsal scales strongly keeled, in fourteen (rarely  $12\frac{2}{3}$  or  $14\frac{2}{3}$ ) longitudinal rows.

*G. scincicauda.*

Brief characterizations of these five species may prove useful:—

**Gerrhonotus principis.**

Lower temporal scales smooth; dorsal and caudal scales weakly keeled; dorsals in fourteen (or  $14\frac{2}{3}$ ) longitudinal rows; dark ventral lines between the longitudinal rows of scales, or absent; azygous prefrontal of moderate size or small; interoccipitals two or three (or 1); back without complete dark cross-bands.

**Gerrhonotus burnettii.**

Lower temporal scales smooth; dorsal and caudal scales strongly keeled; dorsals in sixteen (rarely  $15\frac{1}{2}$  or 18) longitudinal rows; dark ventral lines between the longitudinal rows of scales, or absent; azygous prefrontal usually small or of moderate size; interoccipitals two to four (rarely 1); dorsal color bands usually broken and closer than in *G. scincicauda*.

**Gerrhonotus palmeri.**

Temporal scales keeled; dorsal and caudal scales strongly keeled; dorsals in sixteen longitudinal rows; dark ventral lines absent (or between the longitudinal rows of scales); azygous prefrontal large; interoccipital normally single; back without complete dark cross-bands.

**Gerrhonotus multicarinatus.**

Lower temporal scales smooth; dorsal and caudal scales weakly keeled; dorsals in sixteen (rarely 14 or  $14\frac{2}{3}$ ) longitudinal rows; dark lines along the middle of each of the longitudinal rows of ventral scales; azygous prefrontal large; interoccipital normally single; back with or without complete dark cross-bars.

**Gerrhonotus scincicauda.**

Lower temporal scales smooth; dorsal and caudal scales strongly keeled; dorsals in fourteen (rarely  $12\frac{2}{3}$  or  $14\frac{2}{3}$ ) longitudinal rows; dark lines along the middle of each of the longitudinal rows of ventral scales (very rarely absent); azygous prefrontal large (rarely moderate-sized); interoccipital usually single; back usually with complete dark cross-bands.

*Principis* (B. & G.) finds its home in the Puget Fauna of western Washington and Oregon, and perhaps occurs in the mountains of northern California. *G. burnettii* Gray occupies a narrow strip along the coast of California from Monterey to Mendocino County. *G. palmeri* (Stejneger) is native to the western slope of the Sierra

Nevada of El Dorado, Tuolumne, Mariposa, Fresno and Tulare Counties, California, between the altitudes of 3,700 and 9,000 feet. *G. multicarinatus* (Blainville) appears to be confined to the San Lucan Fauna of Lower California. *G. scincicauda* (Skilton) has been found in northwestern Lower California, in the San Diegan, Californian and Pacific Faunæ of California, in western Oregon and in Washington, its range overlapping those of *G. burnettii*, *G. palmeri* and, probably, *G. principis*.

The probable relationship of these species may be indicated thus:—

